Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for visualization of a 3-dimensional (3-D) image, the method comprising acts of:

converting a 3-D scene model into a plurality of 3-D scene points;

providing at least ~~a portion~~ one of the plurality of 3-D scene points to visualize on a 3-D display plane comprising a plurality of 3-D pixels that are organized in rows and columns and are directionally modulated;

calculating ~~at~~ for each of the plurality of 3-D pixels a contribution of light from the plurality of 3-D ~~pixel~~ pixels to generate at least ~~in~~ a part ~~a~~ of one 3-D scene point of the plurality of 3-D scene points; and

performing at least one of emitting and transmitting the calculated contribution of the light by each of ~~the~~ one or more first 3-D pixels ~~that is calculated to contribute~~ to ~~the~~ generate at least part of the one 3-D scene point,

wherein the contribution of light ~~of a 3-D pixel~~ to a certain 3-D scene point is calculated within one first 3-D pixel of a row or column prior to the ~~provision~~ visualization of the certain 3-D scene ~~points~~ point ~~from the one 3-D pixel that calculated the certain 3-D scene point to remaining~~ for all first 3-D pixels of the row or column that receive the

~~calculated~~ certain 3-D scene point, respectively, and

~~such that one of the pixels of the row or column~~ wherein the one first 3-D pixel acts as a master pixel for the row or column, ~~the master pixel being the 3-D pixel of a row or column that calculated the certain 3-D scene point~~ while ~~other~~ each remaining one or more first 3-D pixels of the row or column act as slave pixels, the slave pixels ~~being the 3-D pixels of a row or column that~~ receive the calculated contribution of the light of the certain 3-D scene point from the master pixel.

2. (Previously presented) The method according to claim 1, wherein light is emitted and/or transmitted by 2-D pixels comprised within the 3-D pixels, each 2-D pixel directing light into a different direction contributing light to a scene point of the 3-D scene model.

3. (Previously presented) The method according to claim 1, wherein the 3-D scene points are provided sequentially, or in parallel, to the 3-D pixels.

4. (Previously presented) The method according to claim 1, wherein the calculation of the contribution of light of a 3-D pixel to a certain 3-D scene point is made previous to the provision of the 3-D scene points to the 3-D pixels.

5. (Canceled)

6. (Canceled)

7. (Currently amended) The method according to claim 1, ~~wherein~~ further comprising an act of a slave 3-D pixel ~~alters~~ altering the co-ordinates of a 3-D scene point prior to putting out the altered 3-D scene point from the slave 3-D pixel to at least one neighboring slave 3-D pixel.

8. (Previously presented) The method according to claim 1, wherein if more than one 3-D scene point needs the contribution of light from one 3-D pixel, the depth information of the 3-D scene point is decisive.

9. (Previously presented) The method according to claim 1, wherein 2-D pixels of the 3-D display plane transmit and/or emit light only within one plane.

10. (Previously presented) The method according to claim 1, wherein color is incorporated by spatial or temporal multiplexing within each 3-D pixel.

11. (Currently amended) A 3-D display device, comprising:

a 3-D display plane ~~with~~ having a plurality of 3-D pixels, said plurality of 3-D pixels comprise an input port and an output port for receiving and putting out 3-D scene points of a 3-D scene, ~~at least a portion~~ one or more of the plurality of 3-D pixels organized in rows

and columns comprise a control unit located at the ~~portion of~~ one or more 3-D pixels for calculating ~~their own~~ a contribution to the visualization of a 3-D scene point representing the 3-D scene ~~and for calculating a contribution to the visualization of a 3-D scene point representing the 3-D scene for each~~ by a first 3-D pixel of a row or column ~~to which a given 3-D pixel of the portion of 3-D pixels~~ and by each 3-D pixel that is a member of the same row or column,

~~such that~~ wherein the ~~given~~ first 3-D pixel of ~~a~~ each row or a column acts as a master pixel for ~~the~~ that row or column, ~~the master pixel being the 3-D pixel of a row or column that calculated the contribution to the visualization of the 3-D scene point representing the 3-D scene for each of a row or column to which the given 3-D pixel of the portion of 3-D pixels is a member,~~ while other 3-D pixels of ~~the~~ that row or column act as slave pixels, the slave ~~pixels being the~~ 3-D pixels of a row or column ~~that~~ receive the calculated contribution to the visualization of the 3-D scene point from the master pixel.

12. (Previously presented) The 3-D display device according to claim 11, wherein the 3-D pixels are interconnected for parallel and serial transmission of 3-D scene points from a 3-D pixel to neighboring 3-D pixels.

13. (Previously presented) The 3-D display device according to claim 11, wherein the 3-D pixels comprise a spatial light modulator with a matrix of 2-D pixels.

14. (Previously presented) The 3-D display device according to claim 13, wherein the 3-D pixels comprise a point light source, providing the 2-D pixel with light.

15. (Previously presented) The 3-D display device according to claim 13, wherein the 3-D pixels comprise registers for storing a value determining which ones of the 2-D pixels within the 3-D pixel contribute light to a 3-D scene point.

16. (Previously presented) The method of claim 1, wherein the calculating of the contribution comprises calculating whether a current 3-D scene point is closer to a viewer than a past 3-D scene point.

17. (Previously presented) The 3-D display device of claim 11, wherein the control unit calculates whether a current 3-D scene point is closer to a viewer than a past 3-D scene point.

18. (Previously presented) The method of claim 1, wherein each 3-D scene point has co-ordinates x, z, y and a luminance value.

19. (Currently amended) A method for visualization of a 3-dimensional (3-D) image, the method comprising acts of:

converting a 3-D scene model into a plurality of 3-D scene points;

providing at least ~~a portion~~ one of the plurality of 3-D scene points to visualize on a 3-D display plane comprising a plurality of 3-D pixels that are directionally modulated;

calculating at each of the plurality of 3-D pixels a contribution of light from ~~the~~ that 3-D pixel to generate at least in part a 3-D scene point of the plurality of 3-D scene points; and

performing at least one of emitting and transmitting calculated contribution of the light by each of the plurality of 3-D pixels that is calculated to contribute to the visualization of at least part of the 3-D scene point,

wherein ~~a~~ each 3-D pixel alters received ~~co-ordinates~~ transmitted calculated contribution of light of ~~a~~ the 3-D scene point prior to putting out ~~the altered 3-D scene point from the 3-D pixel that altered~~ the 3-D scene point to at least one neighboring 3-D pixel that receives the altered calculated contribution of light for visualization of the 3-D scene point, and

wherein for each 3-D pixel that receives an altered 3-D scene point, the act of calculating ~~at the 3-D pixel~~ comprises ~~an act of~~ calculating the contribution of light from ~~the~~ that 3-D pixel based on the altered 3-D scene point.

20. (Currently amended) The method of claim 18, wherein the ~~altered~~ calculated contribution of light for visualization of the 3-D scene point is altered to account for the relative difference in position between ~~two~~ the 3-D pixels.

21. (Previously presented) The method of claim 18, wherein the act of calculating is performed without a use of global position information.